

CLAIMS

What is claimed is:

1. A system for stabilization of an implant in bone tissue of a human or an animal, comprising a prosthetic implant and a resorbable device adapted to be placed between the implant and the bone tissue, wherein the resorbable device is inserted into a cavity between the implant and the bone tissue of the human or the animal, thereby at least partially filling the cavity and reducing movements of the implant relative to the bone tissue, and wherein the resorbable device is at least partially resorbed over a predetermined period of time, thereby allowing for ingrowth of the bone tissue into the cavity.
2. The system of Claim 1, wherein the resorbable device comprises a resorbable polymer.
3. The system of Claim 2, wherein the resorbable polymer is poly-L-lactic acid, polyglactin acid, or a combination thereof.
4. The system of Claim 2, wherein the resorbable device further comprises calcium sulphate, calcium phosphate or a combination thereof.
5. The system of Claim 2, wherein the resorbable device further comprises a bioactive molecule.
6. The system of Claim 5 wherein the bioactive molecule is a growth factor or antibiotic.
7. The system of Claim 1, wherein the resorbable device is a spacer having a predetermined shape that at least partially fills the cavity to reduce movements of the implant relative to the bone.
8. The system of Claim 1, wherein the resorbable device is inserted during a joint replacement surgery.

9. The system of Claim 8, wherein the prosthetic implant is a hip implant, a knee implant, a shoulder implant, or an elbow implant, or a component thereof.
10. The system of Claim 9, wherein the prosthetic implant or the component thereof is inserted into an intramedullary canal of a tubular bone, and wherein the resorbable device is inserted into the cavity between the bone and the prosthetic implant.
11. The system of Claim 10, further comprising an orthopedic cable, wherein the cable is tightened around the bone, thereby tightening the bone around the resorbable device and tightening the resorbable device against the prosthetic implant or the component thereof.
12. The system of Claim 10, further comprising an allograft bone, resorbable granules, or a combination thereof, wherein the allograft bone or the resorbable granules, or the combination thereof, are inserted into the cavity.
13. The system of Claim 10, wherein the joint replacement surgery is revision surgery.
14. The system of Claim 10, wherein the implant is a hip replacement comprising a femoral stem, wherein the femoral stem is inserted into the femoral canal, and wherein the resorbable device is inserted into the cavity between a cortex of the femur and the femoral stem of the hip implant.
15. A method for stabilization of an implant in a human or an animal, comprising:
 - inserting the implant;
 - inserting a resorbable device adapted to be placed between the implant and the bone tissue, wherein the resorbable device is inserted into a cavity between the implant and the bone tissue of the human or the animal, thereby at least partially filling the cavity and reducing movements of the implant

relative to the bone tissue, and wherein the resorbable device is at least partially resorbed over a predetermined period of time, thereby allowing for ingrowth of the bone tissue into the cavity.

16. The method of Claim 16, wherein the resorbable device comprises a resorbable polymer.
17. The method of Claim 15, wherein the resorbable device is inserted during a joint replacement surgery.
18. The method of Claim 17, wherein the prosthetic implant is a hip implant, a knee implant, a shoulder implant, or an elbow implant, or a component thereof.
19. The method of Claim 15, wherein the device is a spacer having a predetermined shape that at least partially fills the cavity to reduce movements of the implant relative to the bone.
20. The method of Claim 18, wherein the prosthetic implant or the component thereof is inserted into an intramedullary canal of a tubular bone, and wherein the resorbable device is inserted into the cavity between the bone and the implant.
21. The method of Claim 20, further comprising, after inserting the device, tightening an orthopedic cable around the bone, thereby tightening the bone around the device and tightening the device against the prosthetic implant or the component thereof.
22. The method of Claim 17, wherein the joint replacement surgery is revision surgery.
23. The method of Claim 20, wherein the implant is a hip replacement comprising a femoral stem, wherein the femoral stem is inserted into a femoral canal, and

wherein the resorbable device is inserted into the cavity between a proximal a cortex of the femur and the femoral stem of the implant.

24. A hybrid resorbable device for stabilization of a prosthetic implant in the bone tissue of a human or an animal, comprising at least one resorbable component and at least one non-resorbable component, wherein the at least one resorbable component is at least partially inserted into the bone tissue, thereby reducing movements of the implant relative to the bone tissue, and wherein the resorbable component is at least partially resorbed over a predetermined period of time, thereby allowing for ingrowth of the bone tissue into a space from which the resorbable component has been resorbed.
25. The hybrid resorbable device of Claim 24, wherein the resorbable component comprises a resorbable polymer.
26. The hybrid resorbable device of Claim 25, wherein the resorbable polymer is poly-L-lactic acid, polyglactin acid, or a combination thereof.
27. The hybrid resorbable device of Claim 25, wherein the resorbable device further comprises a bioactive molecule.
28. The hybrid resorbable device of Claim 27, wherein the bioactive molecule is a growth factor or antibiotic.
29. The hybrid resorbable device of Claim 24, wherein the hybrid resorbable device is an elongated member.
30. The hybrid resorbable device of Claim 29, wherein the hybrid resorbable device is a peg, comprising a locking shoulder portion, and a peg portion, and wherein the non-resorbable component is the locking shoulder portion, and the resorbable component is the peg portion.

31. The system of Claim 24, wherein the resorbable device is inserted during a joint replacement surgery.

32. The system of Claim 31, wherein the implant is a hip implant, a knee implant, a shoulder implant, or an elbow implant.

33. A prosthetic implant system, comprising:

an implant; and

a hybrid resorbable device for stabilization of a prosthetic implant in the bone tissue of a human or an animal, comprising at least one resorbable component and at least one non-resorbable component, wherein the at least one resorbable component is at least partially inserted into the bone tissue, thereby reducing movements of the implant relative to the bone tissue, and wherein the resorbable component is at least partially resorbed over a predetermined period of time, thereby allowing for ingrowth of the bone tissue into a space from which the resorbable component has been resorbed.

34. The prosthetic implant system of Claim 33, wherein the resorbable component comprises a resorbable polymer.

35. The prosthetic implant system of Claim 34, wherein the resorbable polymer is poly-L-lactic acid, polyglactin acid, or a combination thereof.

36. The prosthetic implant system of Claim 34, wherein the resorbable device further comprises a bioactive molecule.

37. The prosthetic implant system of Claim 36 wherein the bioactive molecule is a growth factor or antibiotic.

38. The prosthetic implant system of Claim 33, wherein the hybrid resorbable device is an elongated member.

39.The prosthetic implant system of Claim 33, wherein the resorbable device is inserted during a joint replacement surgery.

40.The prosthetic implant system of Claim 39, wherein the implant is a hip implant, a knee implant, a shoulder implant, or an elbow implant, or a component thereof.

41.The prosthetic implant system of Claim 40, wherein the implant is an acetabular component of a hip implant comprising openings, and the hybrid resorbable device is inserted through the openings into the bone.

42.A method of installing a prosthetic implant in a body of a human or an animal, comprising:

inserting the implant into a body of the human or the animal; and

stabilizing the implant in the body of the human or the animal with a hybrid resorbable device for stabilization of the implant in a human or an animal, comprising one or more resorbable component and one or more non-resorbable component, wherein the resorbable component is at least partially inserted into a tissue of the human or the animal, thereby reducing movements of the implant relative to the tissue, and wherein the resorbable component is at least partially resorbed over a predetermined period of time, thereby allowing for ingrowth of the tissue into the cavity.

43.The method of Claim 42, wherein the resorbable component comprises a resorbable polymer.

44.The method of Claim 43, wherein the resorbable polymer is poly-L-lactic acid, polyglactin acid, or a combination thereof.

- 45.The method of Claim 43, wherein the resorbable device further comprises a bioactive molecule.
- 46.The method of Claim 46, wherein the bioactive molecule is a growth factor or antibiotic.
- 47.The method of Claim 42, wherein the hybrid resorbable device is an elongated member.
- 48.The method of Claim 42, wherein hybrid resorbable device of Claim 29, wherein the hybrid resorbable device is a peg, comprising a locking shoulder portion, and a peg portion, and wherein the non-resorbable component is the locking shoulder portion, and the resorbable component is the peg portion.
- 49.The method of Claim 42, wherein the resorbable device is inserted during a joint replacement surgery.
- 50.The method of Claim 49, wherein the implant is a hip implant, a knee implant, a shoulder implant, or an elbow implant.
- 51.The method of Claim 49, wherein the implant is an acetabular component of a hip implant, comprising openings, and the hybrid resorbable device is inserted through the openings into the bone.